

AMENDMENTS TO THE SPECIFICATION

The paragraph beginning on page 10, line 15, bridging page 11, line 2 has been amended as follows:

The process of the present invention can advantageously be used in laboratory scale but is especially suitable for large scale separations. It can successfully be used in the separation of proteins and components from large fermentations. Using genetic modifications, the method can be used to purify any protein of interest including extracellular enzymes and proteins such as cellulases and hemicellulases from mixtures containing large amounts of protein such as several grams per liter. Furthermore, this separation can be obtained from various culture media including industrial media containing particular materials such as cellulose and spent grain. The method can be used to purify the product from culture media of strains modified not to produce endogenous hydrophobins. The separation can be done directly from the fermentation broth which can additionally contain cells, even viscous filamentous fungi. High biomass levels are acceptable for the process as explained in example 9. An example is the extracellular endoglucanase I from the fungus *Trichoderma*

*reesei* which can be tagged for instance with the class 2 HFBI hydrophobin I (HFBI) and can for example be separated with the nonionic polyoxyethylene C12-C18EO5. In this example the detergent rich phase is the lighter phase and contains most of the tagged endoglucanase while most of the other cellulases, proteases and other enzymes remain in the heavier phase. The mycelium separates to the bottom phase, too. The separation can be achieved using separation temperatures higher than 25°C. The temperature can be decreased if certain salts like NaCl or K<sub>2</sub>SO<sub>4</sub> are added.

The paragraph on page 13, lines 13-20 has been amended as follows:

**Fig. 8** Coomassie-stained 10% ~~SDS-PAGE~~ sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE) of the partitioning of EGIcore-HFBI fusion protein in two-phase separation using 5% of the detergent C12-C18EO5. Lane 1, Molecular weight marker; Lane 2, Purified CBHI (4 µg); Lane 3, Purified EGI (4 µg); Lane 4, 1/10 diluted VTT-D-98691 cellulose-based culture filtrate; Lanes 5 and 6, 1/10 diluted bottom phase and detergent phase (top phase), respectively, after separation of VTT-D-98691

Appl. No. 09/936,823

culture filtrate with 5% detergent; Lane 7, Non-diluted  
bottom phase; Lane 8, Non-diluted VTT-D-98691 cellulose  
culture filtrate.